Hiroshi INOUE*: **Taxonomic miscellany on hepatics (6)****

井上 浩*: 苔類の分類雑記（6）

12. *Plagiochila monalata* Inoue in Taiwan.

Plagiochila monalata Inoue (Bull. Nat. Sci. Mus., ser. B, 13: 48, 1987) was described from Bhutan based on a collection made by Dr. D. G. Long, and it was characterized by 1) the single, linear, edentate paraphyllia around the base of dorsal leaf-insertion line, 2) the broadly ovate leaves with long decurrent dorsal leaf-margin, 3) the spinose teeth usually restricted to the leaf-apex, and 4) the acute, elongated (3.8-4.5 times as long as wide) terminal cells of teeth. I have found a specimen of this species recently collected on Mt. Ali, Chia-yi Hsien, Taiwan, by Dr. Chia-li Wu (Tamkang University, Tamsui, Taiwan) for her purpose of chemical analysis of liverworts.

The plants from Mt. Ali are perfectly identical with those from Bhutan in all respects, though some minor differences can be observed, as in the leaf-shape or the number of teeth. I have observed a few number of vegetative branches in the Taiwan plants which are always of the lateral-intercalary type and as vigorous as the leading shoot. Among the plants from Mt. Ali, there are some male plants which has not been described, and the following is based on the Taiwan plants: Androecia intermediate or terminal on shoot, without lateral innovation, bracts closely imbricate, in 8-13 pairs, basal 2/3 strongly inflated, vertically oriented, with ventral margin recurved, distal 1/3 obliquely to nearly horizontally spreading (or sometimes moderately recurved), margin nearly entire or sometimes with 1-3 small, spinose teeth, antheridia 2-3 per bract.

13. *Marchantia paleacea* Bertol. and *M. diptera* Nees et Mont.

Marchantia diptera Nees et Mont. was originally described from Japan (without the citation of definite locality and collector's name, simply saying that "ad terram in Japonia lecta"). This species has been repeatedly reported from various parts of Japan, as Stephani (1897, as *M. calcarata*; 1899), Makino

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** Continued from Journ. Jap. Bot. 63: 393-398, 1988.

(1897), Horikawa (1930) and Hattori (1944). Hattori (1957) treated this species as a variety of a widely distributed species, *M. paleaceae* Bertol., which was also once reported from Japan by Evans (1917). Hattori's basis for separation into two varieties, var. *paleacea* and var. *diptera*, was the difference of appendage of the ventral scales.

Recently Bischler (1986) discussed *Marchantia paleacea* from view points of geographical variation in morphology, karyotype, ecology, and reproductive behavior, and she concluded that the population in southern Japan is different in the subspecific level from *M. paleacea* (s. str.).

Although Bischler (1986, 1987) repeatedly used "subsp. *diptera* (Nees et Mont.) Hatt." for *M. diptera* or *M. paleacea* var. *diptera* in southern Japan, the name of subspecific level has never been validly published; once Mizutani & Hattori (1976) used "subsp. *diptera*" but this was nomenclatorially invalid. Agreeing with Bischler's concept of *M diptera*, the following nomenclatorial treatment is necessitated:

Marchantia paleacea Bertol. [Opusc. Sci. (Bologna), 1: 242 (1817)] subsp. **diptera** (Nees et Mont.) Hatt. [in Mizutani & Hattori, Journ. Hattori Bot. Lab. 40: 342, 1976; nom. inval.: Art. 32, 2], *stat. nov.*

Basionym: *Marchantia diptera* Nees et Mont. in Mont., Ann. Sci. Nat. Bot. ser. 2, 19: 243 (1843). =*Marchantia paleacea* Bertol. var. *diptera* (Nees et Mont.) Hatt., Journ. Hattori Bot. Lab. 18: 79 (1957).

Synonym: *Marchantia calcarata* Steph., Bull. Herb. Bois. 5: 98 (1897); fide Hattori (1944) and Bischler (1987).

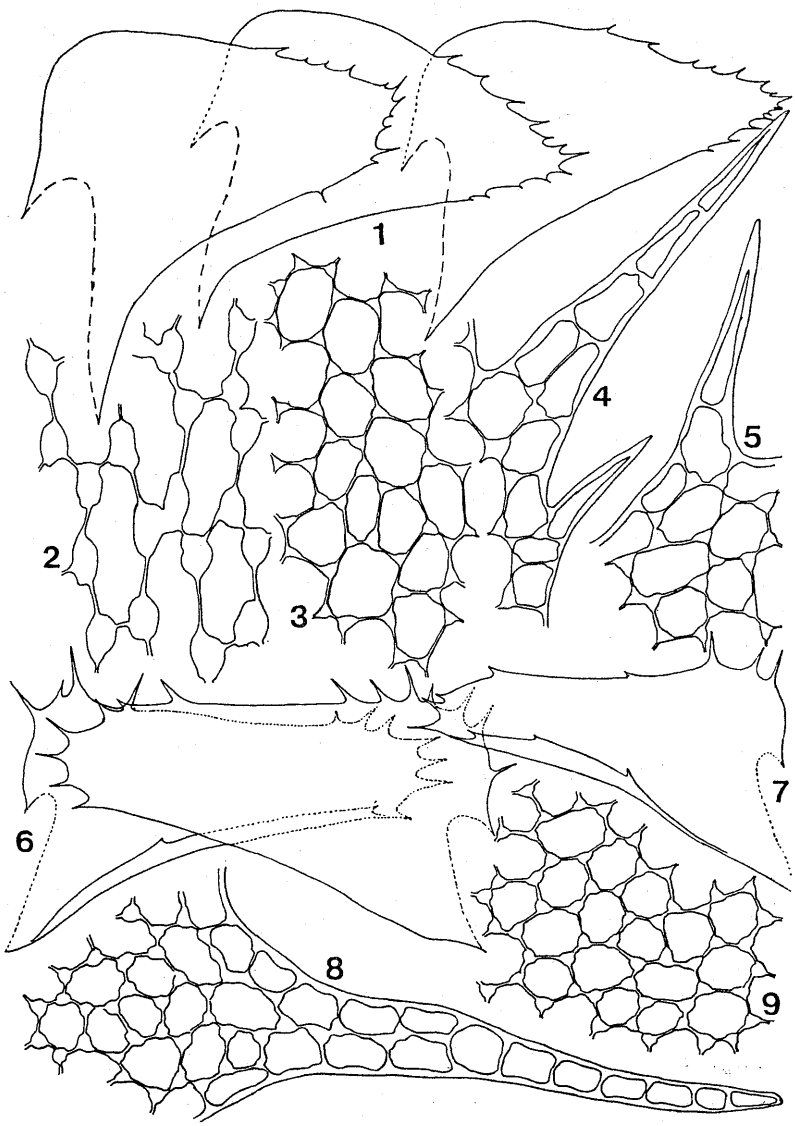
Marchantia planipora Steph., Bull. Herb. Bois 5: 98 (1897); fide Evans (1917), Horikawa (1930), Hattori (1944) and Bischler (1987).

Marchantia alatocapitata Steph. ex Bonner, Candollea 14: 102 (1953); fide Hattori (1944) and Bischler (1987).

Marchantia pulcherrima Steph. ex Bonner, Candollea 14: 110 (1953); fide Bischler (1987).

14. Status of *Plagiochila pacifica* Mitt. (1871).

Plagiochila pacifica Mitt. was described from "Sunday Island" which is now Radul Island in the Kermadec Islands (New Zealand), situated at 30°S, ca 180°E, in Polynesia. Since the original description it was redescribed only by Stephani (1903) and it has been remained in very ambiguous status. I was



Figs. 1-9. *Plagiochila monalata* Inoue (1-5) and *P. pacifica* Mitt. (6-9). 1, 6, 7. Leaves, ×16. 2. Cells from leaf-base, ×350. 3. Cells from leaf-middle, ×350. 4, 5. Teeth on apical leaf-margin, ×350. 8. Tooth from ventral leaf-base, ×230. 9. Cells from leaf-middle, ×230. Figs. 1-5 based on Chia-Li Wu s.n. (TNS), and figs. 6-9 on type of *P. pacifica* (NY).

able to study the type of this species (Sunday Island, leg. Milne no. 87 in NY; isotype in G); the following short description is based on type in NY.

Plants 4–8 cm long and 4–5.5 mm wide on leading shoot, pale brown or greenish brown, with short creeping rhizomatous stem; stem dark brown, the dorsal surface of main shoot nearly completely covered by imbricate leaves, about 700 μ thick, with frequent branches (especially on distal half of shoot) predominantly of the lateral-intercalary type, rarely of the terminal and *Frullania*-type, forming a dichotomous-system; leaves closely imbricate, dorsal margin moderately revolute and narrowly recurved, moderately decurrent along dorsal stem-midline, ventral margin loosely adherent to the bases of opposite leaves, short decurrent, extending to near the ventral stem-midline (leaving ventral merophyte of 2–3 cells broad); flat leaves narrowly oblong-ovate, 1.3–2 mm wide at dilated base or 0.5–0.8 mm wide at apex, 2.5–3.2 mm long, dorsal margin nearly straight, entire or rarely with 1–2 small teeth on distal half, apex rounded or nearly truncate, with 2–4 triangularly acuminate teeth, ventral margin nearly straight from distinctly dilated base, with 2–6 spinose teeth, teeth on ventral dilated margin strongly spinose and elongated, larger than those on apical and ventral, straight margin; cells 20–28×23–30 μ at leaf-middle, walls thin, trigones medium to large in size, triangular or sometimes sub-nodulose (at leaf-base), cuticle smooth; asexual reproduction not seen. Plants known in sterile condition.

The plants in type are all sterile, but the branching system and leaf characters (especially the dilated ventral leaf-base with larger and spinose teeth on margin) clearly indicate that this species is identical with *Plagiochila obscura* Colenso known in New Zealand. As already discussed (Inoue & Schuster 1971, Inoue 1981), *P. obscura* (=*P. pacifica* !) is closely related to *P. powellii* Mitt. (known from Samoa and New Caledonia) and *P. arbuscula* (Brid. ex Lehm. & Lindbg.) Lindbg. (known from Samoa, Tahiti, New Caledonia to Indonesia, northward to southern Japan), forming a species complex in sect. Tayloriae (subsect. Obscurae).

Plagiochila pacifica Mitt., in Seeman, Fl. Vitiensis: 407 (1871).

Synonym: *Plagiochila obscura* Colenso, Trans. Proc. N. Z. Inst. **19**: 281 (1887); Inoue & Schuster, Journ. Hattori Bot. Lab. **34**: 161 (1971).

The full description, discussions on the variation, synonyms and illustrations of this species were given in Inoue & Schuster (1971, as *P. obscura*) based on

New Zealand plants.

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12. *Plagiochila monalata* Inoue は Bhutan から記載されたものであるが，今回，台湾でも発見された。分枝型ならびに雄器について改めて記載を追加した。

13. 日本の低地に分布するフタバネゼニゴケ *Marchantia diptera* の取扱については，H. Bischler の細胞学的ならびに形態学的解析によってツヤゼニゴケ *M. paleacea* の亜種と考えるのが適当であることが分った。この場合の学名は *M. paleacea* Bertol. subsp. *diptera* (Nees et Mont.) Hatt. であるが，この学名はこれまで有効でなかったので，今回有効名として，その異名とともに処理することにした。

14. ニュジーランドの北にあるケルマデック諸島から Mitten によって記載された *Plagiochila pacifica* は，タイプ標本を研究した結果，ニュジーランドに広く分布する

P. obscura Colenso と同じものであるので，学名は Mitten の *P. pacifica* が正名となる。サモア，ニューカレドニアに分布する *P. powellii* Mitt. および東南アジアから南日本に分布する *P. arbuscula* に近似の種類である。

□Vitt, D. H., J. E. Marsh & R. B. Bovey: **Mosses, lichens & ferns of northwest North America** 296 pp. 1988. Lone Pine Publishing, Alberta, Canada. $24.95. 北アメリカ北西部（アラスカからカナダ北西部）に生育する170種のセン類，20種のタイ類，156種の地衣類，28種のシダ類について，カラー写真，特徴，生態を記し，分布図を示してある。各頁のらん外には11種類の記号で各々の植物のグループ分けが示されていて，かつ，色でもってセン類，タイ類その他の群が区別出来るように工夫されている。各々の植物群についてはさらに形態の解説，主要な種類への key などが用意されていて，単なる野外観察用の図鑑でなく，これらの植物群についてのテキストにもなるように工夫されている。写真の取扱いがやや小形で分りにくいものもあり，その反面で記述が不必要に長いものがある。全般として，コケ，地衣，シダの世界への招待としての役目を十分に果たしている。　（井上　浩）

□日本学術振興会（編）：**東南アジアの植物と農林業**（Japan Society for the Promotion of Science (ed.): Botany, agriculture and forestry) i-vi+492 pp., 10 color pls. 1989. 同会，東京.「学術月報」所載のシリーズものを再編出版したもので，最少の補正をして一書とした。日本と関係の近密な国のうちインドネシア，マレーシア，タイ国を取り上げ，この広大な地域の自然および関連する日本側の調査・研究を紹介し，あわせて熱帯植物学，農業技術科学の啓蒙的な読物を期待した。学生生徒の副読本としても使用されることを目指した。32人の第一線の学者による30章はこの地域の基本的条件と科学者たちの反応を紹介した。各章に参考文献があり，巻末には執筆者紹介がある。各章の題目をほしいままに省記すれば，自然地理，フロラ，種分化とその多様性，熱帯林の生産力，伐開，更新，焼畑，土壌，環境保全，微生物，肥料，病害虫，果・菜，機械化（人口）問題，遺伝子資源，農業の起源とでもなろうか。一部の章には上記の地域を世界に広げた論も見られる。本書の読者にはこの地域の将来の展望と，過去・現在の日本人の行動への反省が期待される。カラー図版の色彩が今一つ暗いのは熱帯一般の明るく，透明なイメージをそこなうおそれがある。増刷のときの改善が望まれる。

（津山　尚）